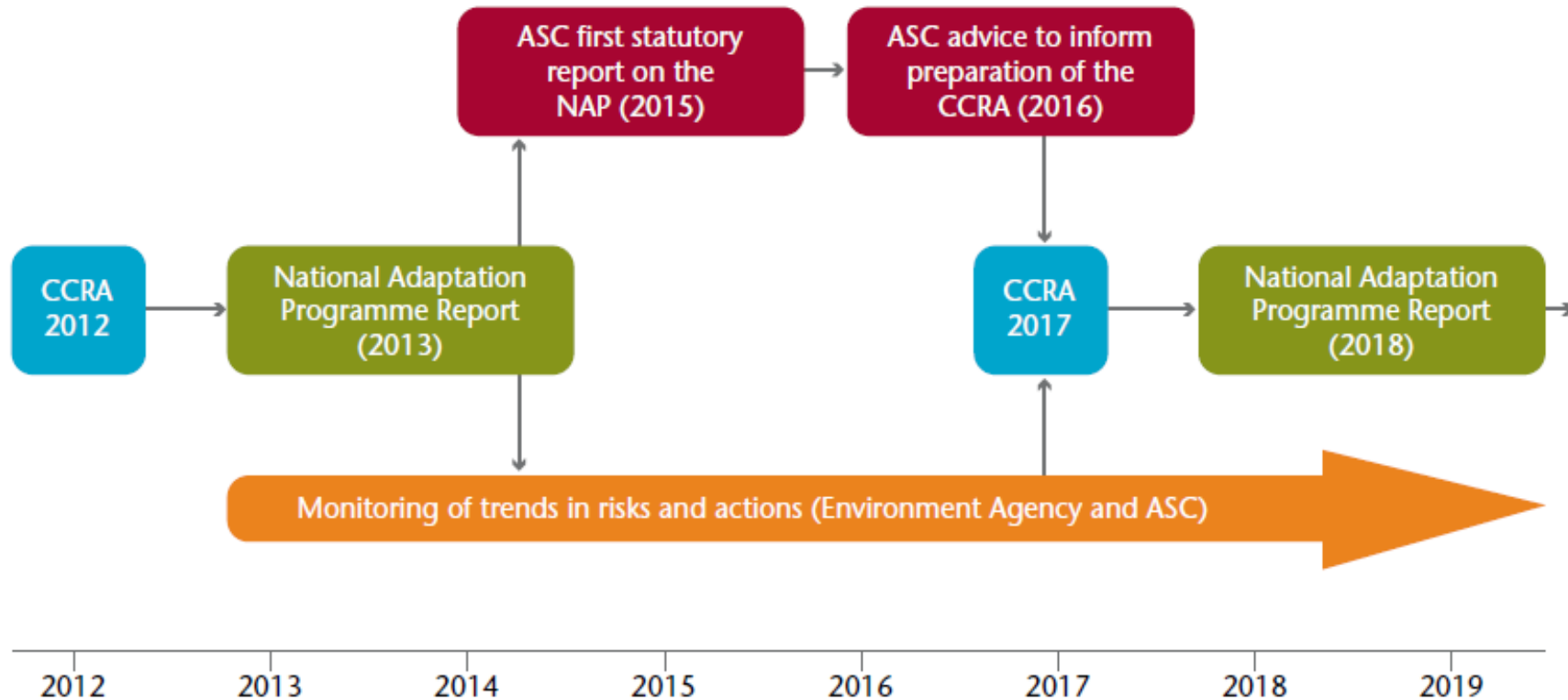


# Requirements for sea level information

The Adaptation Sub-committee

# Climate Change Act established 5 year cycle of risk assessments followed by policy response



## Statutory roles:

- **To provide advice** on the UK climate change risk assessment.
- **To evaluate progress** through the National Adaptation Programme (England only).



Prof Lord John  
Krebs (chair)



Sir Graham  
Wynne



Prof Sam  
Fankhauser

Prof Martin  
Parry

Prof Jim Hall

Prof Dame  
Anne Johnson



# The role of the Adaptation Sub-Committee: *Are we making sufficient progress in preparing for climate change?*



## What's at risk?

- UK Climate Change Risk Assessment

- Changes in vulnerability and exposure
- Climate drivers
- Demographic change
- Impact of growth and development

## What action is being taken?

- UK National Adaptation Programme

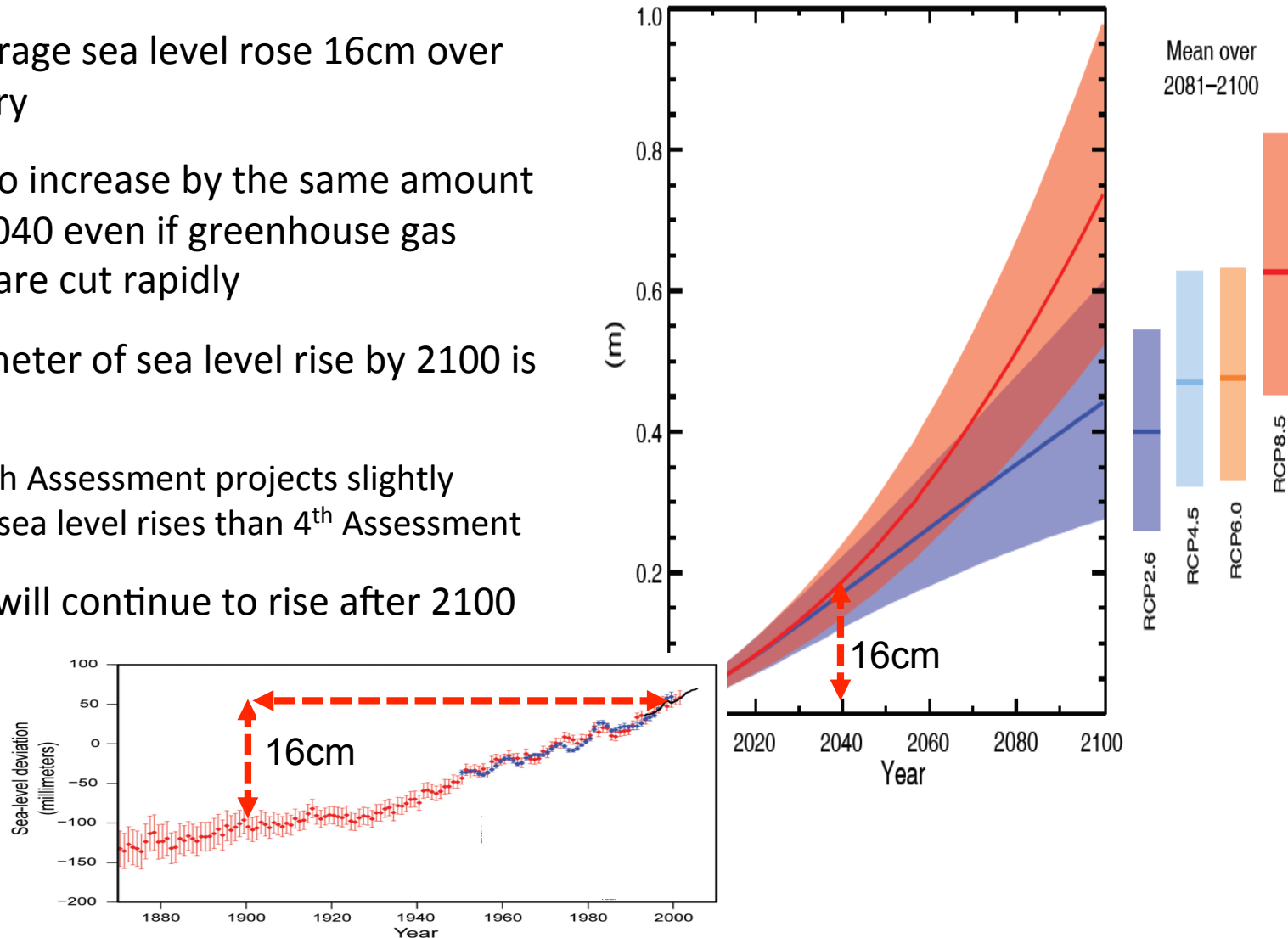
- Direction of travel under existing policy and practice
- Barriers and incentives
- Scope for additional policy 'win-wins', low regret actions
- Need for more strategic, long-term adaptation and reform

## What impacts are we seeing?

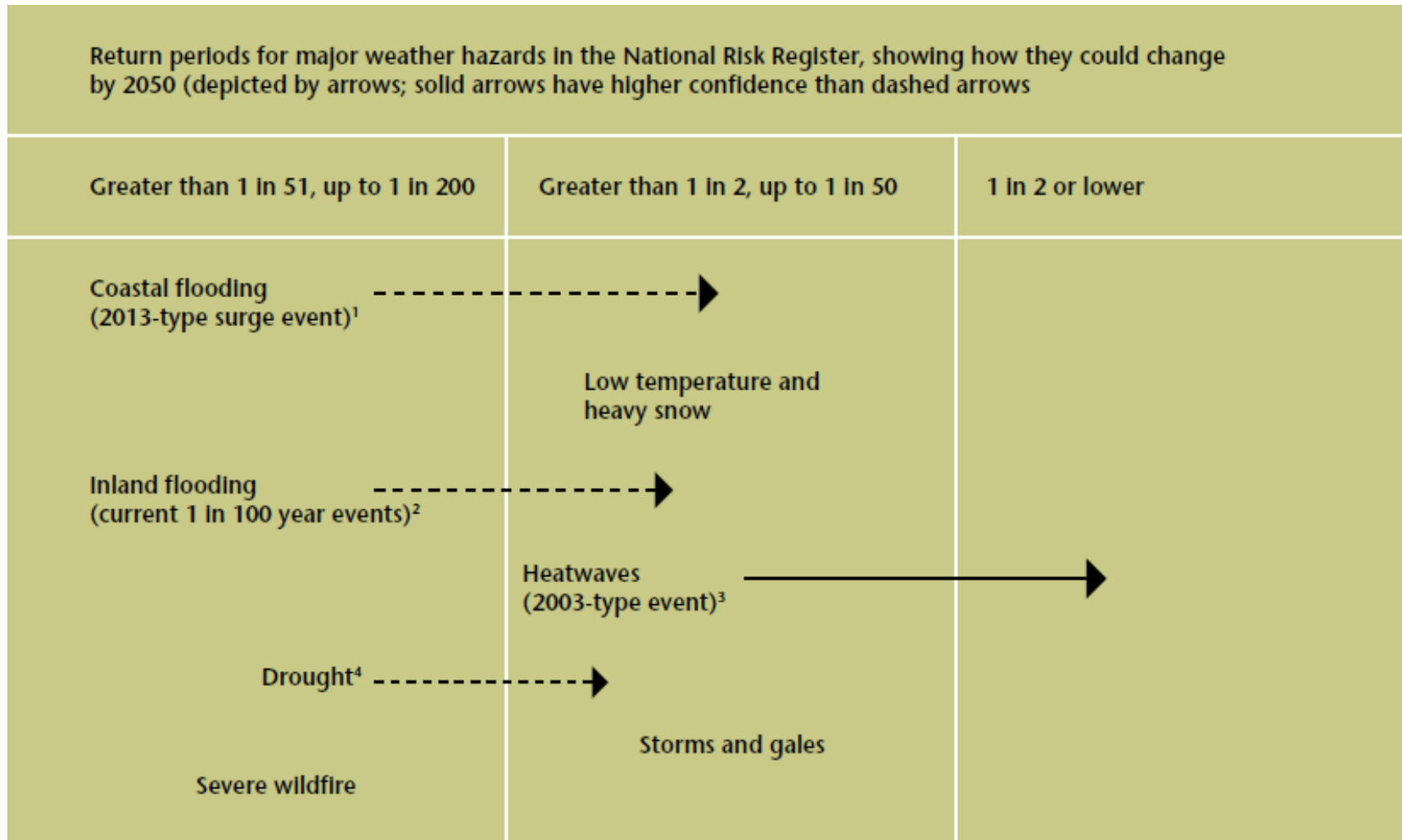
- Are there trends in impacts?
- Can we attribute to historic warming, greenhouse gas emissions?

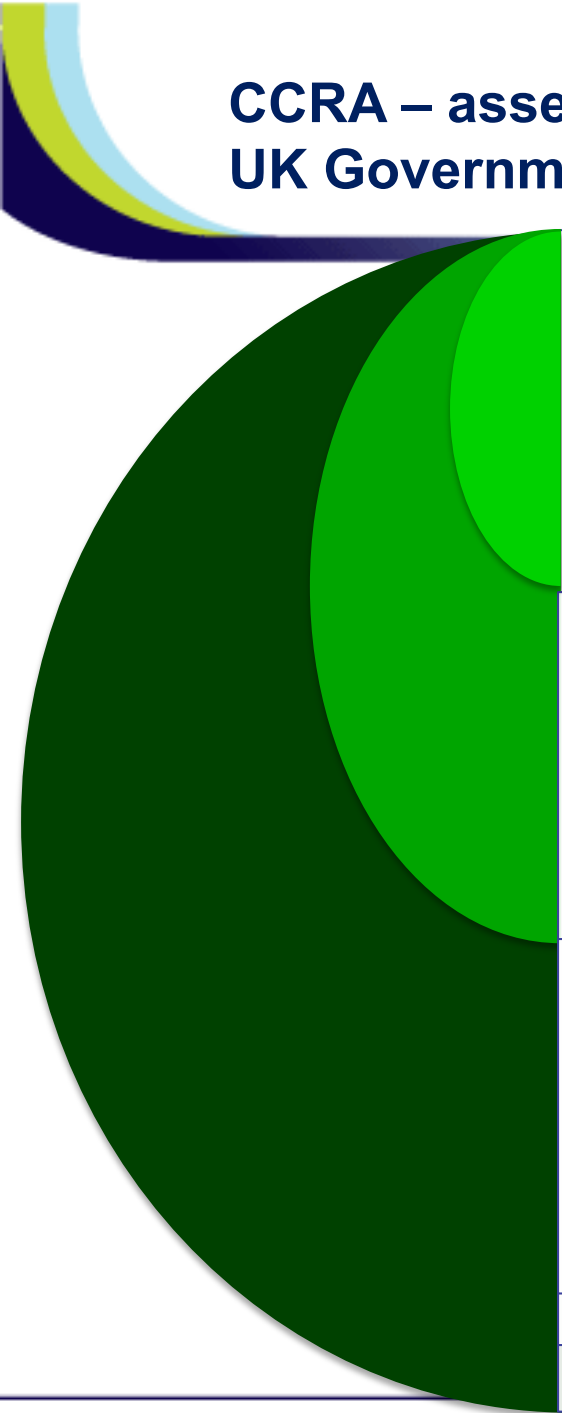
# We have information on global and UK sea level, but how does this translate to regions around the UK?

- Global average sea level rose 16cm over 20<sup>th</sup> Century
- Expected to increase by the same amount again by 2040 even if greenhouse gas emissions are cut rapidly
- Overall a meter of sea level rise by 2100 is plausible
  - IPCC 5th Assessment projects slightly higher sea level rises than 4<sup>th</sup> Assessment
- Sea levels will continue to rise after 2100



# Scrutiny role – we need indicators of current trends and possible future trends. Available data is patchy.





## 1. Assess current vulnerability to climate, adaptation

- Current climate
- Current socio-economic change
- Interactions between risks
- Scale of current adaptation, capacity

## 2. Assess future risks and adaptation

- Future climate
- Future socio-economic change
- Interactions between risks
- Effects of adaptation

## 3. Summarise priorities for 2018-2022

- Summarise the most urgent priorities
- ...including evidence gaps, priorities for action, or changes to policy/ governance structures

## Types of sea level information we think we need



- Regional trends in mean sea level around the UK.
- Regional trends in peak tides (e.g. highest tide level per annum).
- Number of times tide level thresholds are exceeded.
- Number of times coastal defences are breached per annum, and location.
- Comparison of current trends in sea level with future projections ; which pathway are we currently following?



## Some upcoming dates for ASC work



- **June 2015** – First report to Parliament on the National Adaptation Programme published.
- **October – November 2015**- Draft CCRA evidence report goes for peer review.
- **July 2016**- CCRA evidence report published.
- **September 2016** – First report to Scottish Government on the Scottish Adaptation Programme published.